

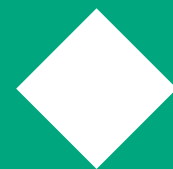
Powered by:



# Hyperion Laser Illumination Systems

Leading-Edge Technologies for Ultra-Miniature Illumination Applications

- Minimally Invasive Surgical Platforms
- Robotic Surgical Systems
- Endoscopic Illumination
- Chandeliers for Ophthalmic Surgery
- Light Guides for Cardiothoracic Platforms
- Industrial Inspection
- Multi-Spectral Imaging



# Overview

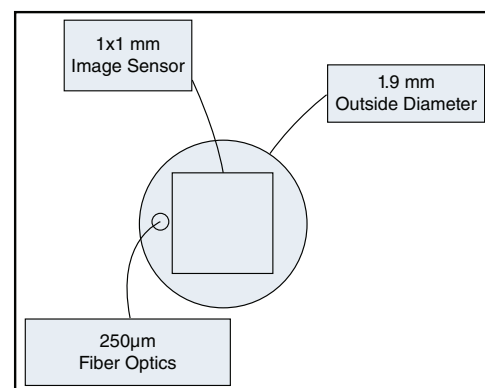
Our patented Hyperion light sources are high-intensity fiber optic illuminators designed specifically for use in medical applications as well as industrial and other applications. The Hyperion 200LV has an integrated video-processing function, while the Hyperion 200L provides an illuminator-only option.

Both are especially well-suited for the illumination of sub-millimeter fiber optics, providing Ushio's high-quality technology in robust and simple packaging.



## H200L & H200LV Features

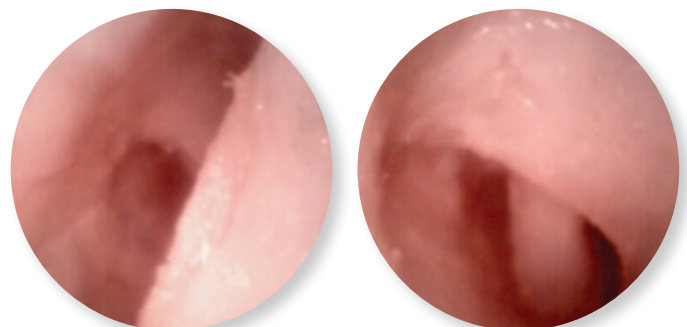
- Complete systems with optics, drivers and power supply
- High intensity visible radiation coupling to  $\leq 250$  micron fibers via front panel
- Cool light reduces melting and burnout of valuable fibers<sup>1</sup>
- Complete set of accessories are available: fibers and mounting kits<sup>2</sup>
- Efficiently match light output to the application using standard optical fiber
- Solid state, no hassle implementation; universal power input
- Custom packaging and wavelengths available<sup>2</sup>



Example of Videoscope enabled by Hyperion technology.

## Applications

- Minimally invasive surgical platforms
- Robotic surgical systems
- Endoscopic illumination
- Chandeliers for ophthalmic surgery
- Light guides for cardiothoracic platforms
- Industrial inspection
- Multi-Spectral Imaging



Actual images taken using the Hyperion illuminator.



H200LV



H200L



Quality Mgmt  
System Registered  
ISO13485:2016  
SAI Global

## Hyperion 200L & 200LV Technical Specifications

Light Output <sup>1</sup> , White	200mW maximum (diffuse radiation)
Fiber Size	250 micron standard (others optional)
Fiber Numerical Aperture	0.63 NA
Color Control	Adjustable
Laser Type	Continuous Wave
Laser Classification	3R (with 250 micron fiber)
Wavelengths	465nm, 525nm, 638nm
Laser Module Life	Up to 20,000 hours
Light Output, IR	Optional, (laser or other <sup>2</sup> )
Light Output Connector	ST <sup>3</sup>
Light Output, Other	Optional 375nm, 405nm, 445nm, 490nm, 730nm, 750nm, 780nm, 808nm, 850nm <sup>2</sup>
Power Input	100 - 240V @ 0.6-1.5A, 50/60 Hz
Enclosure	All metal ventilated housing (customized trade housing optional <sup>2</sup> )
Operating Conditions	10 - 35C, 0% - 95% RH non-condensing
Weight	16.5 lbs / 7.5 kg
Dimensions (WHD)	30.5 x 12.7 x 24.1 cm; 12 x 5 x 9.5 in

Certified to IEC60601-1, 3rd ed., 60601-2-18 Particular requirements for basic safety and essential performance of endoscopic equipment, 60825 Laser Safety, Part 1; Can/CSA C22.2 Number 61010-1.

<sup>1</sup> Light energy is very high, damage may still occur under certain conditions

<sup>2</sup> Engineering charges may apply

<sup>3</sup> Other optical connectors optional—engineering charges may apply

All specifications subject to change without notice.

